

IN CASE OF FIRE



EXIT BUILDING
BEFORE TWEETING
ABOUT IT



IFC PERMIT PROCESS

PRESENTED BY

THE UTAH STATE FIRE MARSHAL'S
OFFICE

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OBJECTIVE

1. To understand the purpose of the permit process and its role in maintaining a safe school environment
2. To understand the role of the school official in the permit process
3. To understand the various permits and where they may be applicable

OVERVIEW

- ❑ Review of Utah Law granting authority to enforce the fire code and State Fire Marshal's Office rules
- ❑ Review of Chapter 1 of the 2009 International Fire Code
- ❑ List of Operational Permits and their requirements
- ❑ List of Construction Permits and their requirements
- ❑ Now what do we do????!!???

Utah Law

UCA 15A-5-101. Title -- Adoption of code

“In accordance with Chapter 1, Part 4, State Fire Code Administration Act, the Legislature repeals the State Fire Code in effect on July 1, 2010, and adopts this chapter as the State Fire Code. “

(Meaning Chapter 15A-5 is now the law where the Fire Code is adopted by the Legislature instead of the Fire Prevention Board)

Utah Law cont'd

15A-5-103. Nationally recognized codes incorporated by reference.

The following codes are incorporated by reference into the State Fire Code:

“(1) the International Fire Code, 2009 edition, excluding appendices, as issued by the International Code Council, Inc., except as amended by Part 2, Statewide Amendments and Additions to IFC Incorporated as Part of State Fire Code;”

Utah Law cont'd

15A-5-201. General provisions.

The amendments and additions in this part, to the IFC, are adopted for application statewide.
(This consists of section 202 to 206, which are all the amendments to the fire code.)

Changes are adopted annually by the Utah
Legislature

Utah Law cont'd

15A-5-207. Amendments and additions to IFC related to existing buildings and referenced standards.

IFC, Chapter 47, Referenced Standards, is amended as follows:

- (1) Under the heading NFPA - National Fire Protection Association, delete the existing "Standard reference number" with regard to the edition and replace it with the following:
 - (a) "NFPA, Standard 10, Portable Fire Extinguishers, 2010 edition";
 - (b) "NFPA, Standard 11, Low-, Medium- and High-expansion Foam, 2010 edition";
 - (c) "NFPA, Standard 12, Carbon Dioxide Extinguishing Systems, 2008 edition";
 - (d) "NFPA, Standard 12A, Halon 1301 Fire Extinguishing System, 2009 edition";
 - (e) "NFPA, Standard 13, Installation of Sprinkler Systems, 2010 edition";
 - (f) "NFPA, Standard 13D, Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes, 2010 edition";
 - (g) "NFPA, Standard 13R, Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, 2010 edition";
 - (h) "NFPA, Standard 14, Installation of Standpipe and Hose Systems, 2010 edition";
 - (i) "NFPA, Standard 17, Dry Chemical Extinguishing Systems, 2009 edition";

Utah Law cont'd

Amendments and additions to IFC continued

- (j) "NFPA, Standard 17A, Wet Chemical Extinguishing Systems, 2009 edition";
 - (k) "NFPA, Standard 20, Installation of Stationary Pumps for Fire Protection, 2010 edition";
 - (l) "NFPA, Standard 22, Water Tanks for Private Fire Protection, 2008 edition";
 - (m) "NFPA, Standard 24, Installation of Private Fire Service Mains and Their Appurtenances, 2010 edition";
 - (n) "NFPA, Standard 72, National Fire Alarm Code, 2010 edition," all "Referenced in code section numbers" remain the same, except the exclusion of Table 508.1.5;
 - (o) "NFPA, Standard 92B, Smoke Management Systems in Malls, Atria and Large Spaces, 2009 edition";
 - (p) "NFPA, Standard 101, Life Safety Code, 2009 edition";
 - (q) "NFPA, Standard 110, Emergency and Standby Power Systems, 2010 edition";
 - (r) "NFPA 720, Installation of Carbon Monoxide (CO) Detection and Warning Equipment, 2009 edition";
 - (s) "NFPA, Standard 750, Water Mist Fire Protection Systems, 2010 edition"; and
 - (t) "NFPA, Standard 1123, Fireworks Display, 2010 edition."
- (2) Under the heading UL -- Underwriters Laboratories, Inc., add the following:
"UL2034, Standard for Single and Multiple Station Carbon Monoxide Alarms, 1998."

Utah Law cont'd

15A-5-302. Amendments and additions to NFPA related to National Fire Alarm Code.

For NFPA 72, National Fire Alarm Code:

- (1) NFPA 72, Chapter 2, Section 2.2, NFPA Publications, is amended to add the following NFPA standard: "NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, 2007 edition."
- (2) NFPA 72, Chapter 4, Section 4.3.2, System Designer, Subsection 4.3.2.2(2), is deleted and rewritten as follows: "National Institute of Certification in Engineering Technologies (NICET) fire alarm level II certified personnel."
- (3) NFPA 72, Chapter 4, Section 4.3.3, System Installer, Subsection 4.3.3(2), is deleted and rewritten as follows: "National Institute of Certification in Engineering Technologies (NICET) fire alarm level II certified personnel."
- (4) NFPA 72, Chapter 4, Section 4.4.3.7, Alarm Signal Deactivation, Subsection 4.4.3.7.2, is amended to add the following sentence: "When approved by the AHJ, the audible notification appliances may be deactivated during the investigation mode to prevent unauthorized reentry into the building."
- (5) NFPA 72, Chapter 4, Section 4.4.5, Protection of Fire Alarm System, is deleted and rewritten as follows: "Automatic smoke detection shall be provided at the location of each fire alarm control unit(s), notification appliance circuit power extenders, and supervising station transmitting equipment to provide notification of fire at the location."

Utah Law cont'd

Amendments and additions to NFPA related to National Fire Alarm Code continued

(6) In NFPA 72, Chapter 4, Section 4.4.5, a new Exception 1 is added as follows: "When ambient conditions prohibit installation of automatic smoke detection, automatic heat detection shall be permitted."

(7) In NFPA 72, Chapter 6, Section 6.8.5.9, Signal Initiation -- Fire Pump, Subsection 6.8.5.9.3 is added as follows: "Automatic fire pumps shall be supervised in accordance with NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, and the AHJ."

(8) NFPA 72, Chapter 7, Section 7.4.1, General Requirements, Subsection 7.4.1.2, is amended as follows: On line three delete "110dBA" and replace it with "120dBA".

(9) NFPA 72, Chapter 8, Section 8.3.4, Indication of Central Station Service, Subsection 8.3.4.7 is amended as follows: On line two, after the word "notified", insert the words "without delay".

(10) NFPA 72, Chapter 10, Section 10.2.2.5, Service Personnel Qualifications and Experience, Subsection 10.2.2.5.1, is deleted and rewritten as follows: "Service personnel shall be qualified and experienced in the inspection, testing, and maintenance of fire alarm systems. Qualified personnel shall meet the certification requirements stated in Utah Administrative Code, R710-11-3, Fire Alarm System Inspecting and Testing."

Chapter 1 of the 2009 International Fire Code as amended

Chapter 1 is the administrative section of the fire code.

(It's what gives the authority to the Fire Official and the procedures to follow in enforcement of the code)

It is divided into 2 parts and 13 sections:

A. PART 1

- ❖ Section 101 Scope and General Requirements
- ❖ Section 102 Applicability

B. PART 2

- ❖ Section 103 Department of Fire Prevention
- ❖ Section 104 General Authority and Responsibilities
- ❖ Section 105 Permits
- ❖ Section 106 Inspections
- ❖ Section 107 Maintenance
- ❖ Section 108 Board of Appeals
- ❖ Section 109 Violations
- ❖ Section 110 Unsafe Buildings
- ❖ Section 111 Stop Work Order
- ❖ Section 112 Service Utilities
- ❖ Section 113 Fees

Section 105 PERMITS

(As pertaining to educational occupancies)

105.1. Permits required by this code SHALL be obtained from the fire code official*.

(*Utah Office of the State Fire Marshal or designee)

The permit shall be kept on the premises at all times and available for inspection by the fire code official.

PERMITS continued

There are 2 types of permits:

1. Operational
2. Construction

PERMITS continued

Operational Permits

An operational permit allows the applicant to conduct an operation or a business for which the permit is required by Section 105.6 for either:

1. A prescribed period of time,
2. Until renewal or revoked

PERMITS continued

Construction Permit

A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by section 105.7

If more than one permit is required at the same location, then the permits may be combined by the fire code official

PERMITS continued

An application needs to be submitted for either of the 2 permit types.

(See sample permit provided)



OFFICE OF THE STATE FIRE MARSHAL
PERMIT APPLICATION

A permit is required to maintain, store, use or handle materials, or to conduct processes which produce conditions hazardous to life or property, or to install equipment used in connection with such activities. The issuance of a permit shall not be construed as authority to violate, cancel or set aside any of the provisions of the code. Such permit shall not take the place of any license required by law.

Business/Agency: _____ Contact Name: _____ Date: _____

Applicant Address: _____

Business Phone: _____ FAX: _____

Type of Permit(s) Applying for:

Amusement Building	Floor Finishing	Misc. Combustible Storage*
Carnivals/Tents/Fairs/Canopies*	Fruit Crop Ripening Process	Open
Flames and Torches		
Combustible dust Producing operations	Fumigation/Insect Fogging	Open
Flames and Candles		
Compressed Gases	Hazardous Materials*	Private Fire Hydrant
Cryogenic Fluids	Hazardous Materials Production*	Pyrotechnic Special
Effects/Fireworks*		
Cutting and Welding*	Hot Works*	Refrigeration Equipment
Exhibits/Trade Shows	Industrial Ovens	Repair Garages/Fuel Dispensing
Explosives*	LP-Gas	Waste Handling
Fire Hydrants	Liquid or Gas-fueled Equipment in Buildings	Wood Products >200CF
Flammable Combustible Liquids*	Lumber Yards	
Other _____		

*Additional information is required; review the following pages for applicable sheets.

Date of Event/Activity: _____

Business/Venue Name: _____

Address of Event/Venue: _____

Emergency Contact: _____ Phone: _____ Cell: _____

Conditions for Approval:

1. Complete application
2. Attach supporting documentation
3. Submit to Fire Marshal's Office

Submit To:

Office of the State Fire Marshal
5272 South College Drive Suite 302
Murray, Utah 84107-2611

Revocation of Permit:

The State Fire Marshal's Office is authorized to suspend or revoke a permit when:

1. The permit has been used by a person other than the person to whom the permit was issued.
2. The permit has been used for a location other than that for which it was issued.
3. Any of the conditions or limitations set forth in the permit have been violated.
4. The applicant failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.
5. There has been a false statement or misrepresentation as to a material fact in the application or plans on which the permit or application was based.
6. The permit was issued in error or in violation of an ordinance, regulation or the code.

Permittable uses shall conform to all applicable requirements of the International Fire Code, and other pertinent laws and ordinances. Construction or use shall not commence prior to issuance of the permit.

Applicant Signature: _____ Date: _____

OPERATIONAL PERMITS

There are 43 designated operational permits listed in the Fire Code.

We will only discuss the major ones that may affect school operations.

105.6.2 Amusement Building

An operational permit is required to operate a special amusement building.

Definition: A structure that, when in use, makes the egress path not readily apparent or definable. May be temporary or permanent.

105.6.4 Carnivals and Fairs

An operational permit is required to conduct a carnival or fair. (See Chapter 24)

(They are considered a place of assembly)

Definition: For purposes of this section, a place of assembly shall include a circus, carnival, tent show, theater, skating rink, dance hall or other place of assembly in or under which persons gather for any purpose.

105.6.8 Compressed Gases

A permit is required to store, handle or use a compressed gas in amounts greater than Table 105.6.8

See the Table in the Fire Code

Table 105.6.8

TABLE 105.6.8
PERMIT AMOUNTS FOR COMPRESSED GASES

TYPE OF GAS	AMOUNT (cubic feet at NTP)
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly toxic	Any Amount
Inert and simple asphyxiant	6,000
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m³.

105.6.11 Cutting and Welding

A permit is required for ANY cutting and welding operations

See Chapter 26 of the Fire Code

Very much common sense stuff! Fire watch, appropriate equipment, fire extinguishers and people who know what they are doing.

105.6.14 Explosives

A permit is required for ANY amount of explosive material including fireworks, black powder and model rocketry within the scope of Chapter 33 of the Fire Code.

More common sense stuff, but should be familiar with the code.

105.6.15 Fire Hydrants and Valves

A permit is required for anyone to operate or use a fire hydrant who is not a member of the fire department or a water company.

So you can't use the hydrant to fill the kiddie pool without a permit!

105.6.16 Flammable and Combustible Liquids

A permit is required to store, use or handle a class I liquid (gasoline) in excess of 5 gallons indoors or 10 gallons outdoors.

This does not include paints, vanishes etc. when appropriately stored and used for maintenance and for no longer than 30 days.

105.6.16 Flammable and Combustible Liquids

Cont'd

Class II (#2 Diesel, Jet fuel) and IIIA (Stoddard Solvent) liquids in excess of 25 gallons indoors or 60 gallons outdoors, exception: fuel oil for heating

Class IIIB (biodiesel fuel) from tanks to a motor vehicle

(A permit may be required for the fuel in Emergency Generators)

105.6.20 Hazardous Materials

See Table 105.6.20 for the Hazardous materials that require a permit and the minimum quantities.

Table 105.6.20

**TABLE 105.6.20
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS**

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section 105.6.16
Corrosive materials	
Gases	See Section 105.6.8
Liquids	55 gallons
Solids	1000 pounds
Explosive materials	See Section 105.6.14
Flammable materials	
Gases	See Section 105.6.8
Liquids	See Section 105.6.16
Solids	100 pounds
Highly toxic materials	
Gases	See Section 105.6.8
Liquids	Any Amount
Solids	Any Amount
Oxidizing materials	
Gases	See Section 105.6.8
Liquids	
Class 4	Any Amount
Class 3	1 gallon ^a
Class 2	10 gallons
Class 1	55 gallons
Solids	
Class 4	Any Amount
Class 3	10 pounds ^b
Class 2	100 pounds
Class 1	500 pounds
Organic peroxides	
Liquids	
Class I	Any Amount
Class II	Any Amount
Class III	1 gallon
Class IV	2 gallons
Class V	No Permit Required
Solids	
Class I	Any Amount
Class II	Any Amount
Class III	10 pounds
Class IV	20 pounds
Class V	No Permit Required

Pyrophoric materials	
Gases	Any Amount
Liquids	Any Amount
Solids	Any Amount
Toxic materials	
Gases	See Section 105.6.8
Liquids	10 gallons
Solids	100 pounds
Unstable (reactive) materials	
Liquids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	5 gallons
Class 1	10 gallons
Solids	
Class 4	Any Amount
Class 3	Any Amount
Class 2	50 pounds
Class 1	100 pounds
Water-reactive materials	
Liquids	
Class 3	Any Amount
Class 2	5 gallons
Class 1	55 gallons
Solids	
Class 3	Any Amount
Class 2	50 pounds
Class 1	500 pounds

For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.

- a. 20 gallons when Table 2703.1.1(1) Note k applies and hazard identification signs in accordance with Section 2703.5 are provided for quantities of 20 gallons or less.
- b. 200 pounds when Table 2703.1.1(1) Note k applies and hazard identification signs in accordance with Section 2703.5 are provided for quantities of 200 pounds or less.

105.6.22 High Piled Storage

A permit is required if the floor area for high-piled storage exceeds 500 S.F.

Definition: High-piled storage is combustible materials stored where the top of the storage is greater than 12 feet. See Chapter 23 of the Fire code.

105.6.23 Hot Works

Permitted hot works include; exhibitions, portable hot work, welding booths, anything in wildfire areas, roof coverings.

See Chapter 26 for further information in the Fire Code.

105.6.24 Industrial Ovens (Kilns)

YES, Kilns are considered industrial ovens and require a permit for operation.

They must comply with Chapter 21 of the Fire Code.

(Essentially install it as per manufacturer specs. A fire extinguisher is required in the area.)

105.6.27 LP-Gas

A permit is required when using or storing LP-gas.

See Chapter 38 of the Fire Code AND NFPA 58 for LP-Gas AND R710-6 of the State Fire Marshal's Office rules.

105.6.30 Open Burning

A permit is required when open burning takes place, anywhere.

Instruction and stipulations of the permit SHALL be adhered to.

School District policy may already address this.

*State Risk Management prohibits bon fires, on school property, in their policies.

105.6.31 Open Flame and Torches

This permit is required for the use of an open flame to remove paint.

105.6.32 Open Flame and Candles

A permit is required to use candles or open flame device in assembly areas, including dining areas of restaurants and drinking establishments. Otherwise they are NOT permitted.

(This means NO in “E” Occupancies)

105.6.35 Private Fire Hydrants

A permit is required for the use, maintenance or removal from service of private fire hydrants.

Exception: TRAINED district personnel can do the above.

105.6.36 Pyrotechnic Special Effects Materials

A permit is required for the handling of pyrotechnic materials

See the SFM Rules, R710-2 on Pyrotechnic displays

105.6.43 Temporary Membrane Structures and Tents

A permit is required if the tent or membrane structure is over 400 S.F. in floor area.

Exception; all must apply:

4 sided open tents under 700 S.F., aggregate area of multiple tents cannot exceed 700 S.F. without a 12' separation, and a minimum separation from other structures of 12'.

Construction Permits

There are 14 designated construction permits listed in the Fire Code.

We will only discuss the major ones that may affect school construction.

105.7.1 Automatic Fire-Extinguishing Systems

A permit is required for the installation or modification of a Fire Sprinkler system

(These permits are already taken care of when submitting plans for review to the Office of the State Fire Marshal. Receipt of an accepted plan review will be considered the permit.)

A copy of the approved set of plans SHALL be on the construction site for review by the local authorities or the AHJ.

105.7.5 Fire Alarm and Detection Systems and Related Equipment

A permit is required for the installation or modification of a Fire Alarm system.

(These permits are already taken care of when submitting plans for review to the Office of the State Fire Marshal. Receipt of an accepted plan review is considered the permit.)

A copy of the approved set of plans SHALL be on the construction site for review by the local authorities or the AHJ.

105.7.6 Fire Pumps and Related Equipment

Construction permits are only required when installing or modifying fire pumps and associated equipment.

Routine maintenance does not require a permit.

105.7.7 Flammable and Combustible Liquids

A permit is required for the installation, removal, abandonment or otherwise disposal of a flammable or combustible liquid tank.

105.7.9 Industrial Ovens

A permit is required for the installation of an industrial oven (kiln)

(This is covered in the plan review for new/modified construction. If a kiln is installed in an existing school then this permit would be required.)

105.7.11 Private Fire Hydrant

A permit is required for the installation of, or modification of a private fire hydrant.

(These permits are already taken care of when submitting plans for review to the Office of the State Fire Marshal. Receipt of an accepted plan review is considered the permit.)

105.7.14 Temporary Membrane Structures or Tents

A permit is required for the construction of a temporary structure over 400 S.F.

Exception; all must apply:

4 sided open tents under 700 S.F., aggregate area of multiple tents cannot exceed 700 S.F. without a 12' separation, and a minimum separation from other structures of 12'.

So What Does This All Mean??????????

A SAFER ENVIRONMENT IN
OUR SCHOOLS DURING
CONSTRUCTION AND
SCHOOL SPONSORED
EVENTS



Detroit Devil's Night Action 2009 Photo Calendar
By: Ed Burke